

Dr. Aron argues that a CLP can utilize UNE-P in order to avoid making the investment necessary for self-deployment. While she makes every effort to tread carefully, she gets dangerously close to the right answer: CLPs rely on UNE-P because a business case that considers all relevant variables cannot be made for the higher risk entry strategy of self-deployment of local circuit switching and UNE-L to serve the mass market. As I explained in my rebuttal testimony, much of the financial risk in self-deployment is created by the fact that the CLP begins with higher unit costs than BellSouth due to both a lower market share and backhaul requirements. In this respect, BellSouth's "first in" advantage is significant and potentially insurmountable. The FCC's TELRIC methodology puts ILECs and CLPs on a more equal footing by neutralizing – to some degree – this "first in" advantage in the pricing of UNEs by equalizing the component of each carrier's cost associated with this investment risk.

A fundamental problem with BellSouth's "potential deployment" analysis is that while Dr. Aron is arguing that CLPs utilize UNE-P in order to reduce their risk to serve mass market customers, Dr. Billingsley is simultaneously arguing that CLPs investing in their own local circuit switches will experience significantly *less* risk than these same carriers have experienced when using UNE-P.<sup>1</sup> Dr. Billingsley's assumption that CLPs will incur less risk and a lower cost of capital when making the substantial investments necessary to self-deploy local circuit switching (and his assumption that the necessary capital will be available at any price) is absurd. Dr. Aron gets closer to the truth: because of the inherently higher risk, a business case analysis cannot support self-deployment of local circuit switching by CLPs to serve mass market customers. A business case can be made, for some geographic markets, to provide such services by utilizing UNE-P.

Dr. Aron also presents rebuttal testimony in support of the inputs of to BellSouth's BACE model. I disagree with Dr. Aron's assumptions that existing retail prices will remain unchanged until the year 2013, that BellSouth has considered revenues at a sufficient level of granularity, and that it is reasonable to expect that all CLPs offering mass market services will capture 15% of the relevant geographic market (particularly if BellSouth's win-back efforts are considered).

When conducting a business case analysis, it is important to consider the likely level of revenues and costs over the time horizon of the analysis. In a short run analysis, it may be appropriate to consider the current level of prices to be fixed. If the analysis encompasses a longer period of time (such as the BACE's immutable ten year assumption), it is necessary to consider the potential for changes in the level of revenues and costs over time. This uncertainty increases as more distant time periods are considered, thereby increasing the risk associated with these more distant expected cash flows. The consideration of projected revenues and costs – and the uncertainty associated with those expectations – is fully

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<sup>1</sup> This assumption causes Dr. Billingsley to significantly understate the relevant cost of capital for CLPs, and subsequently causes BellSouth to utilize a discount rate in the BACE that is much too low to reflect the risks associated with the investments that it analyzes.

consistent with the FCC's conclusion (§517) that when "judging whether entry is economic," states must consider how "competitive risks affect the likelihood of entry."

BellSouth has juxtaposed assumptions of fixed price levels, with a ten year time horizon, and a discount rate based on a *lower* level of risk than CLP's currently face. Dr. Aron refers to "the requirement that the analysis be sufficiently granular to take into account the state of impairment in a particular market," and specifically cites to the FCC's conclusion (§ 485) that an appropriate analysis must consider "the significant variation in the costs and revenues an efficient entrant is likely to face." Unfortunately, the BACE does not (and based on its construction, cannot) do this. BellSouth's existing retail prices for mass market customers are characterized by areas of high rates and low costs, exactly the kind of relationship that the FCC found to be unsustainable. BellSouth's prices and reported costs vary at the wire center level. The price assumptions in the BACE, however, cannot be changed at this level of granularity. Dr. Aron's assertion (p. 16) that it is necessary "to reflect the unique characteristics of the North Carolina customer base" is an accurate description of what a business case model *should* do, but an inaccurate description of what the BACE *can* do.

Dr. Aron states that an ultimate market share of 15% is assumed for each CLP. A review of BellSouth's base run assumptions, however, indicates that the actual assumptions range from 7.53% to 20.12% for residence customers and 3.6% to 32.85% for 1-3 line business customers. If 15% is Dr. Aron's magic number, it is unclear why BellSouth has not actually used it in the BACE.

Dr. Aron's testimony, particularly when compared to Ms. Tipton's, suggests that her assumptions are unlikely to prove true. Ms. Tipton shows between six and seven CLPs in each market using self-provisioned local switching (assuming that some carriers are utilizing UNE-P instead, the actual number of CLPs is therefore likely to be higher). In ten years, Dr. Aron's assumptions yield a total CLP share of the market of between 90% and 105% of the total market.

Dr. Aron fails to incorporate additional relevant information. She does not discuss (and makes no indication that she has considered) that the customers willing to leave BellSouth are likely to be enticed back to BellSouth's due to "win-back" offerings. In its Fourth Quarter 2003 *Investor Relations Competitor Earnings Update*, BellSouth CFO Ron Dykes is quoted as saying that "BellSouth is on the 'bleeding edge' in terms of aggressiveness in win-backs for UNE-P competitors," and that BellSouth has "won back 40% of its consumer losses and more than 60% of its business losses." If BellSouth is "on the bleeding edge of aggressiveness" in its efforts to win back customers from UNE-P providers (customers for whom it receives wholesale revenue to recover network costs), it is reasonable to expect that BellSouth would be somewhere beyond the "bleeding edge of aggressiveness" in its attempts to win back customers from a CLP utilizing self-deployed local circuit switching (customers for whom it receives no revenue).

Based on BellSouth's existing on-but-not-yet-beyond the bleeding edge of aggressiveness win-back offerings, it has been able to entice about half of the customers won by CLPs to return. In other words, a CLP must win two customers from BellSouth in order to keep one. Assuming that Dr. Aron's assumptions about a CLP's ability to attract customers are accurate (as described above, a generous assumption), the BACE has overstated both the rate of customer acquisition and ultimate CLP market share.

While the structure of the BACE makes it impossible to reflect all relevant revenue and cost information with sufficient granularity to perform a meaningful business case analysis, it is possible to consider the impact that certain BellSouth assumptions have on the results. These results can be summarized as follows:

If prices are assumed to decrease by 5.1% per year, and no other changes are made to BellSouth's assumptions, the reported NPV declines to negative 68 million.

If Dr. Billingsley's CLP-specific cost of capital is used, and no other changes are made to BellSouth's assumptions, the reported NPV declines by 78%.

If the CLP market penetration assumptions are adjusted to reflect the impact of BellSouth's win-back pricing, and no other changes are made to BellSouth's assumptions, the reported NPV declines by 73%.

## **BELLSOUTH TELECOMMUNICATIONS, INC.**

(Docket No. P-100, Sub 133q: TRO → UNE-P)

The NCUC is Providing the Direct, Rebuttal, and Surrebuttal Matrices of Issues and Executive Summaries for the Following BellSouth Witnesses:

Kenneth L. Ainsworth - Direct (1/9/04), Rebuttal (2/16/04), Surrebuttal (3/1/04)  
Dr. Debra J. Aron - Direct (1/9/04), Rebuttal (2/16/04), Surrebuttal (3/1/04)  
Dr. Randall S. Billingsley - Direct (1/9/04), Surrebuttal (3/1/04)  
Eric Fogle - Rebuttal (2/16/04), Surrebuttal (3/1/04)  
A. Wayne Gray - Rebuttal (2/16/04), Surrebuttal (3/1/04)  
Alfred A. Heartley - Direct (1/9/04), Rebuttal (2/16/04), Surrebuttal (3/1/04)  
Milton McElroy Jr. - Direct (1/9/04), Rebuttal (2/16/04), Surrebuttal (3/1/04)  
W. Keith Milner - Direct (1/9/04), Rebuttal (2/16/04), Surrebuttal (3/1/04)  
Ronald M. Pate - Direct (1/9/04), Rebuttal (2/16/04), Surrebuttal (3/1/04)  
Dr. Christopher Jon Pleatsikas - Dir (1/9/04), Rebut (2/16/04), Surrebutt (3/1/04)  
John A. Ruscilli - Direct (1/9/04), Rebuttal (2/16/04), Surrebuttal (3/1/04)  
James W. Stegeman - Direct (1/9/04), Rebuttal (2/16/04), Surrebuttal (3/1/04)  
Gray Tennyson - Rebuttal (2/16/04)  
Pamela A. Tipton - Direct (1/9/04), Surrebuttal (3/1/04)  
Alphonso J. Varner - Direct (1/9/04), Rebuttal (2/16/04), Surrebuttal (3/1/04)

**FILED****JAN 09 2004**

**BELLSOUTH TELECOMMUNICATIONS, INC.'S  
MATRIX SUMMARY OF POSITIONS  
DOCKET NO. P-100, SUB 133q**

Clerk's Office  
N.C. Utilities Commission

<b>WITNESS</b>	<b>SUBJECT MATTER OF TESTIMONY</b>	<b>TRO DECISIONAL CRITERIA</b>
Kenneth L. Ainsworth	Hot cut processes	47 C.F. R. §51.319(d)(2)(ii)
Dr. Debra J. Aron	Potential deployment test	47 C.F. R. §51.319(d)(2)(iii)(B)
Randall S. Billingsley	Economic barriers to CLEC entry	47 C.F. R. §51.319(d)(2)(iii)(B)(3)
Alfred A. Heartley	Hot cut processes	47 C.F. R. §51.319(d)(2)(ii)
Milton McElroy	Hot cut processes	47 C.F. R. §51.319(d)(2)(ii)
W. Keith Milner	Potential deployment test	47 C.F. R. §51.319(d)(2)(iii)(B)(3)
Ronald M. Pate	Hot cut processes	47 C.F. R. §51.319(d)(2)(ii)
Dr. Christopher Pleatsikas	Geographic market area	47 C.F. R. §51.319(d)(2)(i)
John A. Ruscilli	Overview and introduction of BellSouth's direct case	47 C.F.R. §51.319(d)(2)(ii) and (iii)
James W. Stegeman	Economic Model – BellSouth's Analysis of Competitive Entry ("BACE")	47 C.F. R. §51.319(d)(2)(iii)(B)
Pamela A. Tipton	Local switching triggers	47 C.F. R. §51.319(d)(2)(iii)(A)
Alphonso J. Varner	Hot cut processes	47 C.F. R. §51.319(d)(2)(ii)

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**JAN 09 2004**

BELLSOUTH TELECOMMUNICATIONS, INC.

EXECUTIVE SUMMARY OF KENNETH L. AINSWORTH

Clerk's Office  
N.C. Utilities Commission

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. P-100, SUB 133Q

JANUARY 9, 2004

In my testimony, I demonstrate two main points: (1) BellSouth has in place a proven, seamless, high quality individual hot cut process to handle Unbundled Network Element Loop ("UNE-L") in volumes likely to result if BellSouth obtains full relief from unbundled circuit switching; and (2) BellSouth has in place a batch hot cut process that provides additional ordering efficiencies and the same proven, seamless, quality migrations as individual hot cuts to convert the embedded base of Unbundled Network Element Platform ("UNE-P") arrangements to UNE-L arrangements if BellSouth obtains full relief from unbundled circuit switching.

Specifically, I will describe that provisioning a hot cut is not a difficult or cumbersome process because, simply defined, a hot cut is moving a jumper from one location to another. The hot cut itself involves basic network functions and skills that are used repeatedly in BellSouth's network every day. The extensive number of customers being served in North Carolina by a combination of a BellSouth loop and a Competitive Local Provider ("CLP") switch demonstrates that BellSouth has a hot cut process that works.

I will also address the general overview of BellSouth's different hot cut processes and the types of hot cut processes and types of coordination levels BellSouth offers to CLPs. There are three (3) different types of hot cut processes BellSouth offers:

1 individual, project, and batch hot cut processes. In addition, BellSouth offers CLPs  
2 three (3) hot cut coordination levels: coordinated / time specific, coordinated, and non-  
3 coordinated.

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5 Throughout my testimony, I describe the effects and benefits resulting from the various  
6 hot cut processes and coordination levels associated with each process that indicates  
7 BellSouth has a seamless hot cut process that ensures minimal end-user service  
8 outage. Further, I address the coordination between BellSouth and the CLPs from the  
9 initial request to the final acceptance by the CLP.

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11 Other areas of concern that I discuss consist of the effectiveness of the hot cut  
12 processes, BellSouth's performance on hot cuts, the scalability to meet load demand,  
13 and the staffing of the Local Carrier Service Center ("LCSC") and Customer Wholesale  
14 Interconnection Services ("CWINS") Centers. Last, but not least, I note that BellSouth's  
15 hot cut processes are regional, and BellSouth performs its hot cut processes the same  
16 way in all nine of its states.

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18 This concludes my summary.

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**FILED**

JAN 09 2004

**In re: Implementation of requirements arising from Federal Communications Commission triennial UNE review: Local Circuit Switching for Mass Market Customers.**

The FCC's Triennial Review Order ("TRO") requires state commissions to determine whether CLPs ("Competitive Local Providers") would be "impaired" in the provisioning of local exchange service if access to the incumbent local exchange carrier's ("ILEC's") unbundled local switching were not available. The FCC prescribes two ways that state commissions are to conduct this analysis. First, the FCC designed a "bright-line" test consisting of certain "triggers" which, if met in a given geographic market, mandates a finding that CLPs are not impaired (within the TRO's meaning of that term) in that geography. BellSouth has conducted the analysis required by the triggers test, and the results of that analysis are provided in the direct testimony of Pamela A. Tipton.



In those geographic markets where the FCC's switching triggers are *not* met, there is an alternative test that state commissions must apply to determine whether CLPs are impaired without access to unbundled local switching. This alternative analysis is referred to as the "potential deployment" approach to determining impairment, and it involves considering three factors: evidence of actual deployment, potential operational barriers, and potential economic barriers. (47 C.F. R. 51.319(d)(2)(iii)(B).)

The purpose of my testimony is to address the issue of whether there are economic barriers in those geographic markets in North Carolina where the FCC's switching triggers are not met that would impair a CLP's ability to provide local exchange service if it lacked access to unbundled switching. My testimony addresses the economic foundation upon which such an examination of potential economic barriers should be based. I note that the FCC requires that such an analysis use a "business case" approach. I conclude that the appropriate analysis based on a business case that the FCC requires involves the determination of the net present value of the expected revenues and costs that could be expected if a CLP were to enter a particular market using its own self provisioned switching. I then discuss the economic model that BellSouth has submitted (the BACE model) and how this model accurately captures the analysis required by the potential deployment test as established by the FCC.

I also discuss a number of key inputs that I have provided to the model, such as the expected penetration that CLPs could be expected to achieve over the time period analyzed, the appropriate churn rate for customers, and the appropriate cost of customer acquisition, as well as the appropriate level of such factors as "general and administrative costs." I explain how I developed the values that I recommend for these inputs.

Finally, I provide the results of running the BACE model for the markets in North Carolina using the inputs that I and others have provided. I have determined that by using the potential deployment test established by the FCC, there are five geographic markets in North Carolina where the FCC switching triggers test is not met, but where CLPs would still not be impaired without access to BellSouth's unbundled switching. Those market areas are Asheville Zone 1, Goldsboro Zone 1, Hickory-Morganton (NC/TN) Zone 1, Wilmington Zone 1, and Raleigh-Durham-Chapel Hill Zone 2.

**FILED**

**BEFORE THE  
NORTH CAROLINA UTILITIES COMMISSION  
DOCKET NO. P-100, SUB 133Q**

**JAN 09 2004**

**Clerk's Office  
N.C. Utilities Commission**

**EXECUTIVE SUMMARY**

**DIRECT TESTIMONY OF  
DR. RANDALL S. BILLINGSLEY, CFA**

The purpose of my direct testimony is to provide an estimate of the forward-looking costs of capital for the representative competing local provider (CLP) company modeled in the BellSouth Analysis of CLP Entry (BACE) model. My testimony provides the appropriate costs of capital to be used in the BACE model, which determines whether any lack of access to BellSouth Telecommunications' (BST) switch unbundled network element (switch UNE) makes entry by a CLP uneconomical. More specifically, the costs of capital presented in my testimony are for use in calculating the net present value (NPV) of the cash flows generated by the products of the representative CLP entering the North Carolina market, as measured in the BACE model. Accordingly, I provide evidence concerning the representative CLP's forward-looking cost of equity, cost of debt, and overall cost of capital. The capital cost estimates I provide are all stated on a before-tax basis. Importantly, the after-tax cash flows produced by the BACE model must all be discounted at after-tax capital costs.

Given the data problems resulting from the current troubled environment facing the CLP industry, I essentially provide "ceiling" and "floor" estimates of the industry's capital costs. Thus, I use two surrogates to measure the representative CLP's capital costs. I use the Standard & Poor's Composite 500 Index (S&P 500) as a lower-bound estimate of the representative CLP's cost of capital and I also use a sample of publicly-traded CLPs that provides an upper-bound estimate of the representative CLP's cost of capital. I then provide a reasonable estimate of the industry's overall capital costs by averaging the results of my two approaches.

For the S&P 500 surrogate I apply the discounted cash flow (DCF) model to the firms in the S&P 500 to measure the cost of equity of average-risk firms operating in a competitive environment. Reliance on the S&P 500 is based largely on the FCC's recent clarification that the index is a "... useful benchmark for the risk faced on average by established companies in competitive markets" (Verizon Arbitration Order, p. 41, §90.). Thus, I apply the DCF model to the S&P 500 to provide a conservative, market-determined cost of equity capital estimate for the representative CLP. This is the derivation of the cost of capital that I believe should form the floor for any analysis of the cost of capital for the representative CLP.

For the surrogate composed of a group of publicly-traded CLPs, I apply the capital asset pricing model (CAPM) to estimate the cost of equity capital. Because the average cost of equity for this sample reflects the severe financial distress of the industry, it provides an upper-bound estimate of the representative CLP's sustainable, efficient cost of equity. I cannot use the DCF method on this sample because these CLPs do not pay dividends.

The appropriate cost of debt is determined for each of my two surrogates. First, I determine the cost of debt for the representative CLP using the current yield on the average bond rating category of firms in the S&P 500. Second, I estimate the cost of debt using the average bond rating for firms operating in the CLP industry. I rely on the average market value-based capital structure for each of the two surrogates. Averaging the costs of equity, the costs of debt, and the capital structures of the two surrogates provides a reasonable estimate of the overall pre-tax cost of capital for the representative CLP that should be used in the BACE business case model.

My analysis indicates that a forward-looking cost of equity estimate for the representative CLP using the DCF and CAPM approaches is an average of 17.55%. I also find evidence that the cost of debt of the representative CLP is an average of 9.92%. The average market value-based capital structure of firms is 58.50% debt and 41.50% equity. Combining this average capital structure with the above average costs of debt and equity produces an average pre-tax overall cost of capital for the representative CLP of 13.09%.

In summary, I recommend that the Commission use a *before-tax* overall cost of capital of 13.09% to discount the cash flows produced by the BACE business case model. As noted above, the capital cost estimates I provide are all stated on a before-tax basis. The after-tax cash flows produced by the BACE model must be discounted at after-tax capital costs so as to produce a reliable NPV estimate.

**FILED**

**JAN 09 2004**

BELLSOUTH TELECOMMUNICATIONS, INC.

EXECUTIVE SUMMARY OF ALFRED A. HEARTLEY

Clerk's Office  
N.C. Utilities Commission

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

JANUARY 9, 2004

My name is Alfred A. Heartley and my business address is 754 Peachtree Street, Atlanta, Georgia 30308. My title is General Manager -- Wholesale Performance and Regional Centers. I graduated from North Carolina State University in 1971 with a BS Degree in Applied Mathematics. I have over 32 years experience in the telecommunications industry working for BellSouth.

The Purpose of my testimony is to explain how the BellSouth Network Services organization is prepared to scale the network operations to provide seamless, cost-effective hot cuts in volumes likely to be presented if BellSouth obtains full relief from providing unbundled circuit switching. Second, I will demonstrate that the network operations portion of BellSouth's hot cut processes is regional.

BellSouth provides service to both retail and wholesale customers through its Network Services organization, which is responsible for performing the actual provisioning, maintenance, and repair of customer services within the nine BellSouth states. In the single or batch hot cut process the central office operations employees will perform the actual central office wiring required to perform the hot cut. The installation and maintenance employees will perform any wiring changes required in the outside plant network to perform the hot cut. Network Services is prepared to move personnel to

locations requiring additional staffing if the local employees cannot handle the increased load. As the FCC recognized in BellSouth's section 271 proceedings, BellSouth's network forces and network processes and procedures are regional.

BellSouth has run force models to forecast the additional load necessary in the centers and in network operations if BellSouth receives relief from unbundled switching.

BellSouth made various assumptions about the volume of UNE-Loops in its forecast. In each instance, however, BellSouth took the highest expected volumes to generate a "worst-case" view of UNE-L volume. The model generated a maximum load of 44 hot cuts in a central office per business day. The total hot cut load per day for all central offices in North Carolina under BellSouth's worst-case view is 1120. Based on this load, the model yielded a force increase of an additional 121 central office employees and 68 installation and maintenance employees in North Carolina.

BellSouth is prepared to hire and train the 189 additional technicians in North Carolina if necessary. This process will only require 4-5 months. The transition period in the order is almost 2 years. Network Services does not foresee a problem in handling the UNE-P to UNE-L transition and the UNE-L ongoing load in North Carolina if unbundled switching relief is granted.

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JAN 09 2004  
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N.C. Utilities Commission

BELLSOUTH TELECOMMUNICATIONS, INC.  
EXECUTIVE SUMMARY OF MILTON MCELROY JR.  
BEFORE THE NORTH CAROLINA UTILITIES COMMISSION  
DOCKET NO. P-100, Sub 133Q  
JANUARY 9, 2004

**Executive Summary**

The purpose of my testimony is to demonstrate that BellSouth's Bulk Migration Process of Unbundled Network Element Platform ("UNE-P") service to unbundled loop ("UNE-L") service is both seamless and effective. BellSouth had no significant commercial data with which to demonstrate the efficiency and viability of the bulk migration process other than the extensive performance data demonstrating the effectiveness of its individual hot cut process. Therefore, BellSouth engaged PricewaterhouseCoopers ("PwC") to perform an independent third party test through an attestation examination where BellSouth would make assertions and PwC would test the assertions to determine if they were valid. BellSouth selected PwC because of the Commission's familiarity with PwC's work resulting from the regionality testing PwC conducted as part of BellSouth's 271-approval process. This Commission, along with the Federal Communications Commission ("FCC"), relied upon PwC's objective and professional findings as part of its 271 decision.

BellSouth made two (2) assertions. First, BellSouth asserted that its Bulk Migration Process enables a Competing Local Provider ("CLP") to migrate multiple end-users from UNE-P service to UNE-L service. In order to facilitate the test, BellSouth created a

1 pseudo-CLP. The pseudo-CLP submitted multiple bulk order requests following the  
2 written procedures provided to the CLPs on the BellSouth website.

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4 BellSouth made the second assertion to provide proof that the Bulk Migration Process  
5 applies ubiquitously across the BellSouth region. BellSouth asserted that the Bulk  
6 Migration Process requires central office and field technicians to physically perform the  
7 hot cut process. This hot cut process is the very same process used for non-bulk or  
8 individual hot cuts in BellSouth's nine-state region. In spite of the multiple hot cut  
9 offerings, the act of performing a hot cut remains a simple, straightforward task – and  
10 one that BellSouth performs at high volumes with a high degree of accuracy and speed.

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12 During the test period, PwC did identify and list a few items that it titled deviations.  
13 These deviations are thoroughly discussed in my testimony. It is important to look at  
14 the total context of the PwC testing. PwC observed some 724 bulk migrations and 179  
15 individual single migrations to test BellSouth's assertions<sup>2</sup>. At the end of this testing  
16 period, 100% of the hot cuts were successfully completed which can be attributed to the  
17 numerous checks and balances that BellSouth has intentionally built into the hot cut  
18 process. Because of the existence of multiple crosschecks, the omission of one (1)  
19 step, as observed by PwC, does not typically derail the actual conversion. Through the  
20 testing conducted by PwC, BellSouth has demonstrated that its Bulk Migration Process  
21 of UNE-P service to UNE-L service is both seamless and effective across the BellSouth  
22 region. The test corroborates the testimony of BellSouth's witness, Mr. Ken Ainsworth,  
23 that BellSouth provides a proven, high quality hot cut process to handle the UNE-L  
24 volumes that would likely result if BellSouth were to obtain full relief from unbundled  
25 circuit switching.



**FILED**

**JAN 09 2004**

**Clerk's Office  
N.C. Utilities Commission**

BELLSOUTH TELECOMMUNICATIONS, INC.

EXECUTIVE SUMMARY OF W. KEITH MILNER

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. P-100, SUB 133Q

January 9, 2004

In my testimony, I describe the engineering and network architecture assumptions that support BellSouth's Analysis of Competitive Entry ("BACE") Model. The model describes how an efficient provider of local telecommunications service can enter the market as a facilities-based provider. I also discuss how a Competing Local Provider ("CLP") would likely develop and grow its network in order to serve mass-market customers.

Through a series of diagrams in the exhibit attached to my testimony, I will describe options available to a CLP that can be used whereby a CLP can enter a market to serve a high concentration of mass-market customers, as well as a market that is not so dense. The CLP must determine which option works best for its particular business situation. Based on the flexibility depicted in the diagrams, the CLP can also use the configurations indicated as its market grows.

I will also address other issues such as collocation requirements, possible CLP switching scenarios, and the facilities required to enter the market. Please note that the CLP must continuously manage the capacities of its collocation, switching, and transport to meet the needs of its customer base. This is no different than activities required of BellSouth to serve all of its customers, including CLPs.

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2 This concludes my summary.

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**FILED**

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

JAN 09 2004

DOCKET NO. P-100, SUB 133Q

Clerk's Office  
N.C. Utilities Commission

Executive Summary of the Direct Testimony of Ronald M. Pate  
of BellSouth Telecommunications, Inc., filed on January 9, 2004

The purpose of my testimony is to describe BellSouth's electronic ordering process that CLPs use to migrate batches of existing non-complex Unbundled Network Element – Port/Loop Combinations (UNE-P) Services to Unbundled Network Element – Loops (UNE-Ls), including UNE-L plus local number portability (LNP), which is part of BellSouth's entire seamless and effective process for batch migrations. BellSouth's electronic ordering process for UNE-to-UNE batch migrations allows CLPs to migrate multiple UNE-P end-users to a UNE-L offering without submitting multiple individual local service requests (LSRs). With this electronic process, a CLP can migrate 2 to 99 UNE-P accounts to UNE-L with a single submission. Depending on the conditions, each batch migration request could conceivably migrate as many as 2,475 end users as an account can include a maximum of 25 telephone numbers.

BellSouth implemented this fully-mechanized, electronic process on March 29, 2003, following the collaborative Change Control Process. When the process was put into service, BellSouth provided CLPs with the necessary documentation to ensure their successful implementation.

CLPs may use any of the three electronic ordering interfaces provided by BellSouth to submit a batch migration request. When writing the requirements for the electronic ordering process, BellSouth was able to reduce the number of data fields that CLPs must enter for each account,

thus reducing the number of entries that a CLP has to complete for each account. This results in the CLP providing certain data entries at a global level that is applicable to all accounts on the batch migration request along with the pertinent data that is specific to each individual account.

After BellSouth's systems receive the batch migration request, it first checks the entire request for basic data entry errors. If a batch migration request contains such errors, BellSouth returns it to the CLP. The CLP may then correct the batch migration request and submit a supplemental request to BellSouth.

If there are no basic errors in the batch migration request, BellSouth's systems will accept the request and will generate 2 to 99 individual LSRs, using the minimal information provided by the CLP. BellSouth's systems will then process the individual LSRs just as if they had been electronically submitted individually by the CLP. Accurate and complete LSRs flow-through BellSouth's OSS to the service order generator, which results in a firm order confirmation (FOC) to the CLP for each LSR. The service orders then move to BellSouth's downstream systems for provisioning, which is described in the testimony of BellSouth's witness, Mr. Ken Ainsworth.

Lastly, my testimony discusses the scalability of BellSouth's existing ordering OSS, which are designed to accommodate both current and projected volumes of LSRs. The Florida Third Party Test provided confirmation that BellSouth's ordering OSS responded effectively to normal, peak and stress volume testing. Further, BellSouth's commercial usage confirms the ability of BellSouth's OSS to handle high volumes.

**FILED**

**JAN 09 2004**

**BELLSOUTH TELECOMMUNICATIONS, INC.**

**Clerk's Office  
N.C. Utilities Commission**

**BEFORE THE**

**NORTH CAROLINA UTILITIES COMMISSION**

**DOCKET NO. P-100, Sub 133q**

**SUMMARY OF THE DIRECT TESTIMONY OF**

**DR. CHRISTOPHER JON PLEATSIKAS**

**JANUARY 9, 2004**

Section 51.319(d)(2)(i) of the Rules promulgated by the Federal Communications Commission ("FCC") in connection with its Triennial Review Order ("TRO") requires commissions to define the "relevant geographic area" that they will use as their geographic unit of analysis in determining whether competitive local providers ("CLPs") are impaired without unbundled access to an incumbent local exchange carrier's ("ILEC's") local circuit switching to serve mass-market customers. The purpose of my testimony is to provide the appropriate, economically sound definition of these "geographic areas" for this Commission's use in this proceeding.

Based on my considerations of the factors that the FCC has outlined, I recommend that the Commission define as the relevant geographic markets in North Carolina the UNE rate zones ("UNE Zones") that this Commission has defined previously, subdivided into Component Economic Areas ("CEA") as defined by the Bureau of

Economic Analysis, a part of the United States Department of Commerce. Twenty-two markets exist in North Carolina as a result of using this definition.

**FILED**

**JAN 09 2004**

**Clerk's Office  
N.C. Utilities Commission**

BELLSOUTH TELECOMMUNICATIONS, INC.  
EXECUTIVE SUMMARY OF JOHN A. RUSCILLI  
BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. P-100, SUB 133Q

JANUARY 9, 2004

My testimony provides an overview of BellSouth's position on the issues that the North Carolina Utilities Commission ("Commission") will address in determining the geographic markets in North Carolina where competing local providers ("CLPs") are not "impaired" without unbundled local switching – a finding that I will refer to as "impairment" in this testimony. My testimony begins by outlining the delegation that the FCC has made to the state commissions. After discussing what the FCC has directed the state commissions to do, I introduce BellSouth's witnesses. These witnesses will explain in detail the evidence that addresses the issues that the FCC has asked the state commissions to examine, including demonstrating that CLPs are not impaired within the meaning of the Federal Telecommunications Act of 1996 ("the Act") in specific geographic areas in North Carolina. I provide information regarding certain interpretive decisions that BellSouth has made with respect to the FCC's Triennial Review Order,<sup>1</sup> such as using the FCC's default demarcation point for differentiating between "mass market" customers and "enterprise" customers. I also discuss the appropriate rate for batch hot cuts and address the availability of collocation in BellSouth's central offices. Finally, I address BellSouth's provisioning of co-carrier cross connects and show that these operational factors do not cause CLPs to be impaired.

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<sup>1</sup> *In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, et al.*, CC Docket No. 01-338, et al., *Report and Order and Order on Remand and Further Notice of Proposed Rulemaking*, FCC 03-36, released August 21, 2003.

**FILED**

**JAN 08 2004**

**Clerk's Office  
N.C. Utilities Commission**

1                   BELLSOUTH TELECOMMUNICATIONS, INC.  
2                   EXECUTIVE SUMMARY OF JAMES W. STEGEMAN  
3                   BEFORE THE NORTH CAROLINA UTILITIES COMMISSION  
4                   DOCKET NO. P-100, Sub 133Q  
5                   JANUARY 9, 2004

6  
7   **Executive Summary**  
8

9   In its Triennial Review Order ("TRO") the FCC requires state commissions to consider whether  
10   CLPs would be economically impaired without access to UNE switching when impairment  
11   triggers have not been met. In my testimony, I describe the BellSouth Analysis of Competitive  
12   Entry (BACE) model. BACE was developed specifically to assess CLP economic impairment.  
13   My testimony provides an overview of the model development, the basic approach employed in  
14   the model, the architecture, logic, and processing of the model, the data required, and the  
15   model's reporting capability.

16  
17   In order to be consistent with the FCC's TRO, an impairment model must have the following  
18   characteristics: 1) The model must be capable of granular analysis; 2) the model must allow  
19   inputs consistent with an efficient CLP business model and efficient CLP network architecture;  
20   3) the model must incorporate all likely CLP revenues and costs; and 4) the model must perform  
21   a business case analysis using Net Present Value (NPV) calculations.

22  
23   BACE satisfies these characteristics and is consistent with the TRO.  
24



1 At its core, BACE provides a framework to determine whether a CLP can economically provide  
2 telecommunication-based service, without the ability to obtain unbundled switching from the  
3 Incumbent Local Exchange Carrier (ILEC). As such, BACE provides the framework to estimate  
4 the revenues available to CLPs in a geographic market and the cash outlays, or costs, CLPs will  
5 incur when providing services in that geographic market. The present value of the CLP costs are  
6 compared to the present value of the CLP revenues for specific geographic markets to determine  
7 the Net Present Value (NPV) of CLP entry for that market, using an appropriate network  
8 infrastructure. BellSouth witness Dr. Debra Aron explains how a positive NPV for CLPs in the  
9 geographic market being studied indicates an absence of impairment in that market.

10

11 The major sections of my testimony discuss the following topics:

- 12 1) Introduction.
- 13 2) BACE background. This includes a discussion of why the model was built, the  
14 nature of its development, and the fundamental approach employed by the model.
- 15 3) A discussion of how BACE is consistent with the FCC's TRO.
- 16 4) An overview of the model architecture, various processing steps, and a  
17 description of some of the advantages of BACE.
- 18 5) An overview of the BACE data requirements.
- 19 6) A discussion of price calculation in BACE.
- 20 7) A discussion of quantity calculation in BACE.
- 21 8) A discussion of revenue calculation in BACE.
- 22 9) A discussion of cost calculation in BACE, including optimization steps.
- 23 10) A discussion of tax calculation in BACE.
- 24 11) A discussion of the reports obtained from BACE.
- 25 12) A discussion of the tests performed on the BACE model.